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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THOMAS USTACH, DAVID S. McCUE, and AMANDA GENE MELTZER

Application 14/573,204² Technology Center 3600

Before ERIC S. FRAHM, BETH Z. SHAW, and MATTHEW J. McNEILL, *Administrative Patent Judges*.

FRAHM, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF CASE

¹ Throughout this Opinion, we refer to: (1) the Final Office Action mailed November 2, 2017 ("Final Act."); (2) the Appeal Brief filed May 23, 2018 ("Appeal Br."); (3) the Examiner's Answer mailed September 14, 2018 ("Ans."); and (5) the Reply Brief filed November 14, 2018.

² The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. § 112, e.g., to rename the first paragraph therein as 35 U.S.C. § 112(a). The filing date of the present application is December 17, 2014, after the AIA's effective date for applications (i.e., March 16, 2013). Accordingly, this Decision refers to the post-AIA version of 35 U.S.C. § 112.

Introduction

Appellant³ appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1, 4–11, 13–24, and 26–30.⁴ Claims 2, 3, 12, and 25 have been canceled (*see* Final Act. 2; Appeal Br. 10, 12, 14, Claims Appendix). We have jurisdiction under 35 U.S.C. § 6(b).

We reverse the rejection under 35 U.S.C. § 112(a).

Appellant's Disclosed and Claimed Invention

Appellant's disclosed and claimed invention, entitled "Bumper Assembly" (Title), is a bumper assembly for use in a commercial environment, such as a retail store (*see* Spec. ¶¶ 1, 2). The use of bumper assemblies mitigates damage to product storage fixtures "by deflecting and/or absorbing the force of impact by objects such as shopping carts, shopping baskets, and customers" (*see* Spec. ¶ 3).

Appellant recognized that although bumpers made of "flexible plastic material ha[ve] the advantage of absorbing forces of impact from objects such as shopping carts, shopping baskets, and customers without breaking or becoming permanently deformed" (Spec. ¶ 10), they "are generally

³ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. "The word 'applicant' when used in this title refers to the inventor or all of the joint inventors, or to the person applying for a patent as provided in §§ 1.43, 1.45, or 1.46." 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as McCue Corporation (Appeal Br. 1). ⁴ Throughout this Opinion, we refer to: (1) the Final Office Action mailed November 2, 2017 ("Final Act."); (2) the Appeal Brief ("Appeal Br.") filed May 23, 2018; (3) the Examiner's Answer mailed September 14, 2018 ("Ans."); and (4) the Reply Brief filed November 14, 2018. The oral hearing scheduled for April 17, 2020, and rescheduled for July 29, 2020, was waived by Appellant's paper filed June 24, 2020.

susceptible to sustaining unsightly abrasions when they are hit by an object" and "suffer from problems such as shrinkage over time due to temperature, material degradation over time, and customer concerns that the plastic material may include dangerous materials (e.g., bisphenol-A)" (Spec. ¶ 10).

Appellant also recognized that bumpers made of metallic materials like stainless steel "are unlikely to break or sustain abrasions when hit by an object" (Spec. ¶ 11), but "are susceptible [to] becoming dented or otherwise permanently deformed when hit by an object" (Spec. ¶ 11) and are difficult to install (*see* Spec. ¶ 11).

Accordingly, Appellant's invention pertains to a two-piece bumper assembly 100 (see Fig. 2), that is made up of an elongate rigid shell 102 mounted on an elongate base 104 having a flexible latching element 222 (see also Fig. 3, 346) for latching the shell 102 to the base 104. This two-piece construction, using a rigid outer shell and a flexible base/latch assembly, provides a bumper assembly that is (i) abrasion and deformation resistant (see Spec. ¶ 15); and (ii) simple to install (see Spec. ¶ 16), and "more aesthetically pleasing than some conventional bumpers due to the two-piece bumper assembly" (Spec. ¶ 17), due to its two piece construction.

Exemplary Claim

Independent claim 1 under appeal is exemplary. Claim 1, with bracketed lettering/numbering, formatting, and emphases added to key portions of the claim at issue, reads as follows:

1. A bumper assembly comprising:

[A] an elongate rigid shell formed of a metallic material and having a first degree of rigidity, the shell including

[A1] an inner surface;

[A2] an outer surface;

[A3] a first shell edge; and

[A4] a first flange protruding from the first shell edge in a direction toward the inner surface of the elongate rigid shell,

[B] an elongate base including

[B1] a base body including a first base edge;

[B2] a first flexible latching element extending from the first base edge of the base body, the first flexible latching element including a first latching protrusion having a first inclined outer surface and a first shoulder, the first flexible latching element having a second degree of rigidity less than the first degree of rigidity; and

[B3] a plurality of support members extending from the base body, each support member including a proximal end attached to the base body, a distal end including a contact portion for substantially preventing deformation of the elongate rigid shell, the contact portion configured to lie adjacent to the elongate rigid shell when the elongate base is inserted into the elongate rigid shell, and a shaft extending between the proximal end and the distal end,

wherein the contact portion has a width greater than a width of the shaft;

wherein the elongate base is configured for insertion into the elongate rigid shell, with the first flange causing deflection of the first flexible latching element and engaging the first shoulder of the first latching protrusion.

Appeal Br. 10, Claims Appendix (emphases, formatting, and bracketed lettering/numbering added). Remaining independent claim 11 recites commensurate limitations pertaining to a bumper assembly, and includes an end cap (*see* Figs. 6–14; Spec. ¶¶ 9, 25–33).

Examiner's Rejection

The Examiner rejected claims 1, 4–11, 13–24, and 26–30 under 35 U.S.C. § 112(a) as failing to comply with the written description requirement, i.e., to provide an adequate written description of the claimed invention so as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was effectively filed (Final Act. 2–3). Specifically, the Examiner determined that the Specification lacks support for the recitations of "flexible" and "rigid" as used to describe the elongated shell (*see e.g.*, claim 1, limitation A) and the flexible latching element (*see e.g.*, claim 1, limitation B2) of the elongated base (*see e.g.*, claim 1, limitation B), as recited in claims 1 and 11 (*see* Final Act. 3; Ans. 3–5). The Examiner also determined that "[t]he disclosure does not provide an explanation or support for the degrees of rigidity of the different elements of the claimed invention relative to one another" (Final Act. 3).

Appellant's Contentions

With regard to the written description rejection of claims 1, 4–11, 13–24, and 26–30, Appellant presents arguments on the basis of independent claim 1, and relies on those arguments as to the patentability of the remaining claims (*see* Appeal Br. 5–9; Reply Br. 1–8).

Appellant contends paragraphs 4 and 46 of the Specification provide adequate support for limitations A and B2 recited in claim 1 (*see* Appeal Br. 6; Reply Br. 1, 3–5). Appellant also contends the following:

- (1) That "it would not have been unreasonable for the ordinary artisan to recognize that obviously the cantilever has a lesser degree of rigidity than the flange" (Appeal Br. 7);
- (2) "[T]hat the meanings of 'flexible' and 'rigid' are well known enough so that no express definitions should be required" (Appeal Br. 8);
- (3) "There is the consistent use of 'rigid' and 'flexible' to describe the relevant parts. And the description of how the device operates would only be possible if the latch and shell had the rigidity relationship as claimed" (Appeal Br. 9);
- (4) "Although the text does not state that the shell is more rigid than the latch, this would be the most obvious explanation for the phenomenon described in ¶ 46" (Reply Br. 3), with the result being that "the latch flexes because it is less rigid than the shell" (Reply Br. 4);
- (5) "[I]t is entirely reasonable for one of ordinary skill in the art to infer from ¶ 46 that the shell must be more rigid than the latch," and "[s]uch an inference would be entirely consistent with the described phenomenon of the shell's flange deflecting the latch rather than the other way around" (Reply Br. 4);
- (6) "[O]ne of ordinary skill in the art would have understood from ¶ 46 that [Appellant] was in possession of an invention in which the flexible latching element is less rigid than the shell, which is precisely what the claim recites" (Reply Br. 5);

- (7) The shell "is formed from a metallic material" as disclosed in paragraph 4 of the Specification (Reply Br. 1);
- (8) "[O]ne of ordinary skill in the art would recognize that most metals at room temperature are fairly rigid" (Reply Br. 2); and
- (9) Accordingly, there are plenty of good reasons for why one of ordinary skill in the art would have understood Applicant to be in possession of the claimed invention. There is the reference to "shell," which suggests something more rigid than what it encloses. There is the consistent use of 'rigid' and 'flexible' to describe the relevant parts. And the description of how the device operates, would only be possible if the latch and shell had the rigidity relationship as claimed" (Appeal Br. 9).

Claims 1 and 11, as independent claims, each recite commensurate limitations regarding "an elongate rigid shell formed of a metallic material and having a first degree of rigidity" (see, e.g., claim 1, limitation A), and "an elongate base" (see, e.g., claim 1, limitation B) having a "first flexible latching element having a second degree of rigidity less than the first degree of rigidity" (see, e.g., claim 1, limitation B2). Therefore, we find the arguments regarding claim 1 dispositive of all claims rejected for written description.

Principal Issue on Appeal

Based on Appellant's arguments in the Appeal Brief (Appeal Br. 5–9) and the Reply Brief (Reply Br. 1–8), the following issue is presented on appeal:

Did the Examiner err in rejecting claims 1, 4–11, 13–24, and 26–30 as lacking written description support for the recitations in claims 1 and 11 of "an elongate rigid shell formed of a metallic material and having a first degree of rigidity" (see, e.g., claim 1, limitation A), and "an elongate base" (see, e.g., claim 1, limitation B) having a "first flexible latching element having a second degree of rigidity less than the first degree of rigidity" (see, e.g., claim 1, limitation B2), on the basis that the Specification as originally filed did not reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was effectively filed?

ANALYSIS

We agree with (i) Appellant's contentions one through nine listed above, and as a result, (ii) Appellant's conclusions that the Examiner erred in rejecting claims 1, 4–11, 13–24, and 26–30 under 35 U.S.C. § 112(a) as failing to provide an adequate written description of the invention.

The test for compliance with the written description requirement is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*). "[T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology." *Id.*; *cf. U.S. v. Telectronics, Inc.*, 857 F.2d 778, 785 (Fed. Cir. 1988) ("The test of *enablement* is whether one reasonably

skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.").

However, "actual 'possession' or reduction to practice outside of the specification is not enough. Rather, . . . it is the specification itself that must demonstrate possession." *Ariad*, 598 F.3d at 1352; *see also PowerOasis*, *Inc. v. T-Mobile USA*, *Inc.*, 522 F.3d 1299, 1306-07 (Fed.Cir.2008) (explaining that § 112, first paragraph, "requires that the written description actually or inherently disclose the claim element"). "[I]t is not a question of whether one skilled in the art might be able to construct the patentee's device from the teachings of the disclosure. . . . Rather, it is a question whether the application necessarily discloses that particular device. . . . A description which renders obvious the invention for which an earlier filing date is sought is not sufficient." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) (quoting *Jepson v. Coleman*, 314 F.2d 533, 536 (CCPA 1963)).

The "elongate rigid shell" and "first flexible latching element" are functional terms, defined by what these elements do rather than what the elements are, and as such do not inherently render claim 1 indefinite. *See Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008). In fact, functional language can "promote[] definiteness because it helps bound the scope of the claims by specifying the operations that the [claimed invention] must undertake." *Cox Commc'ns*, 838 F.3d at 1232. When a claim limitation is defined in "purely functional terms," a determination of whether the limitation is sufficiently definite is "highly

dependent on context (e.g., the disclosure in the specification and the knowledge of a person of ordinary skill in the relevant art area)."

Halliburton, 514 F.3d at 1255. The ambiguity inherent in functional terms may be resolved where the Specification "provides a general guideline and examples sufficient to enable a person of ordinary skill in the art to determine the scope of the claims." Enzo Biochem. Inc. v. Applera Corp., 599 F.3d 1325, 1335 (Fed. Cir. 2010).

Here, paragraphs 4 and 46 and original claim 1 of the Specification support not only (i) the use of the terms "rigid" and "flexible" in claims 1 and 11, but also (ii) the degrees of rigidity of the different elements of the claimed invention relative to one another.

Paragraphs 4 and 46 of the Specification describe the relationship between the elongate rigid shell and first flexible latching element in the following manner:

In a general aspect, a bumper assembly includes an elongate <u>rigid</u> shell formed of a metallic material and an elongate base. The elongate rigid shell includes an inner surface, an outer surface, a first shell edge, and a first flange protruding from the first shell edge in a direction toward the inner surface of the elongate rigid shell. The elongate base includes a base body including a first base edge and a first flexible latching element extending from the first base edge of the base body, the first flexible latching element including a first latching protrusion having a first inclined outer surface and a first shoulder. The elongate base is configured for insertion into the elongate rigid shell with the first flange compressing the first <u>flexible</u> latching element and engaging the first shoulder of the first latching protrusion.

Spec. \P 4 (emphases added).

Focusing first on the first latching element 222, as the elongate <u>rigid</u> shell 102 is lowered onto the elongate base 104, the first flange 212 makes contact with the first inclined surface 348 of the first latching protrusion 346. As the elongate rigid shell 102 continues to be lowered onto the elongate base 104, the first flange 212 maintains contact with the first inclined surface 348. Since the first flange 212 is made of a <u>rigid</u> material, and the first latching element 222 is <u>flexible</u>, the first cantilevered portion 342 is <u>deflected</u> inward toward the base body 221 as the first flange 212 moves along the first inclined surface 348.

Spec. ¶ 46 (emphases added).

And, original claim 1 sets forth the concept of the general relationship between the shell and latching element by using the terms "rigid" and "flexible" as follows:

1. A bumper assembly comprising:

an elongate <u>rigid</u> shell formed of a metallic material, the shell including

an inner surface:

an outer surface;

a first shell edge; and

a first flange protruding from the first shell edge in a direction toward the inner surface of the elongate rigid shell; an elongate base including

a base body including a first base edge; and

a first <u>flexible</u> latching element extending from the first base edge of the base body, the first flexible latching element including a first latching protrusion having a first inclined outer surface and a first shoulder;

wherein the elongate base is configured for insertion into the elongate rigid shell with the first flange compressing the first flexible latching element and engaging the first shoulder of the first latching protrusion.

Spec. ¶ 16, Claim 1 (emphases added).

Based on the foregoing disclosures, one of ordinary skill in the art at the time of the invention would understand that the rigid shell has a higher degree of rigidity than the flexible latching element, as recited in limitations A and B of claim 1, and as commensurately recited in claim 11. Because original claim 1 and paragraphs 4 and 46 of the Specification show and describe the concept of a rigid shell having a higher degree of rigidity than the flexible latching element of the base, the originally filed Specification reasonably conveys to one of ordinary skill in the art that Appellant had possession of the disputed limitation recited in claims 1 and 11. In this light, we agree with Appellant's arguments (see Appeal Br. 5–9; Reply Br. 1–8) that the originally filed Specification fully supports the limitations recited in claims 1, 4–11, 13–24, and 26–30 of "an elongate rigid shell formed of a metallic material and having a first degree of rigidity" (see, e.g., claim 1, limitation A), and "an elongate base" (see, e.g., claim 1, limitation B) having a "first flexible latching element having a second degree of rigidity less than the first degree of rigidity" (see, e.g., claim 1, limitation B2).

Therefore, based upon the findings above, on this record, we are persuaded of error in the Examiner's determinations that the disputed limitations, as well as the *concept* of relative rigidity of the shell and latching element of the base, lack written description support. We cannot agree with the Examiner that (i) the terms "rigid" and "flexible" are not well known enough, and thus express definitions of these terms are required (*see* Ans. 5); or (ii) more detail is needed in the Specification as to "the extent of how the shell is rigid, and the specific degree of rigidity" (Ans. 4).

CONCLUSION

In summary, on the record before us on appeal, Appellant has persuaded us that the Examiner erred in rejecting claims 1, 4–11, 13–24, and 26–30 as being unpatentable under 35 U.S.C. § 112(a) for lack of written description support in the Specification. Therefore, we do not sustain the Examiner's written description rejection.

For all of the reasons above, we hold as follows:

Claims	35	Reference(s)/Basis	Affirmed	Reversed
Rejected	U.S.C. §			
1, 4–11,	112(a)	Written		1, 4–11,
13–24,		Description		13–24, 26–
26–30		1		30

REVERSED